

**PROGRAMMABLE SUBSCRIBER LINE CIRCUIT PARTITIONED INTO
HIGH VOLTAGE INTERFACE AND DIGITAL CONTROL SUBSECTIONS**

ABSTRACT

A subscriber line interface circuit has a battery-powered, high voltage analog section, that drives tip and ring lines of a subscriber loop, and a mixed signal (low voltage and digital signal processing) section, 5 that monitors and controls the high voltage analog section. An input signal receiving unit of the high voltage analog section conditions input voice and low voltage signaling and ringing signals from the mixed signal section, for application to a dual mode, 10 programmable gain, tip/ring amplifier coupled to the loop. A sense amplifier at the output of the tip/ring amplifier is through an auxiliary amplifier to an analog feedback monitor port for closing a loop to synthesize the circuit's output impedance.